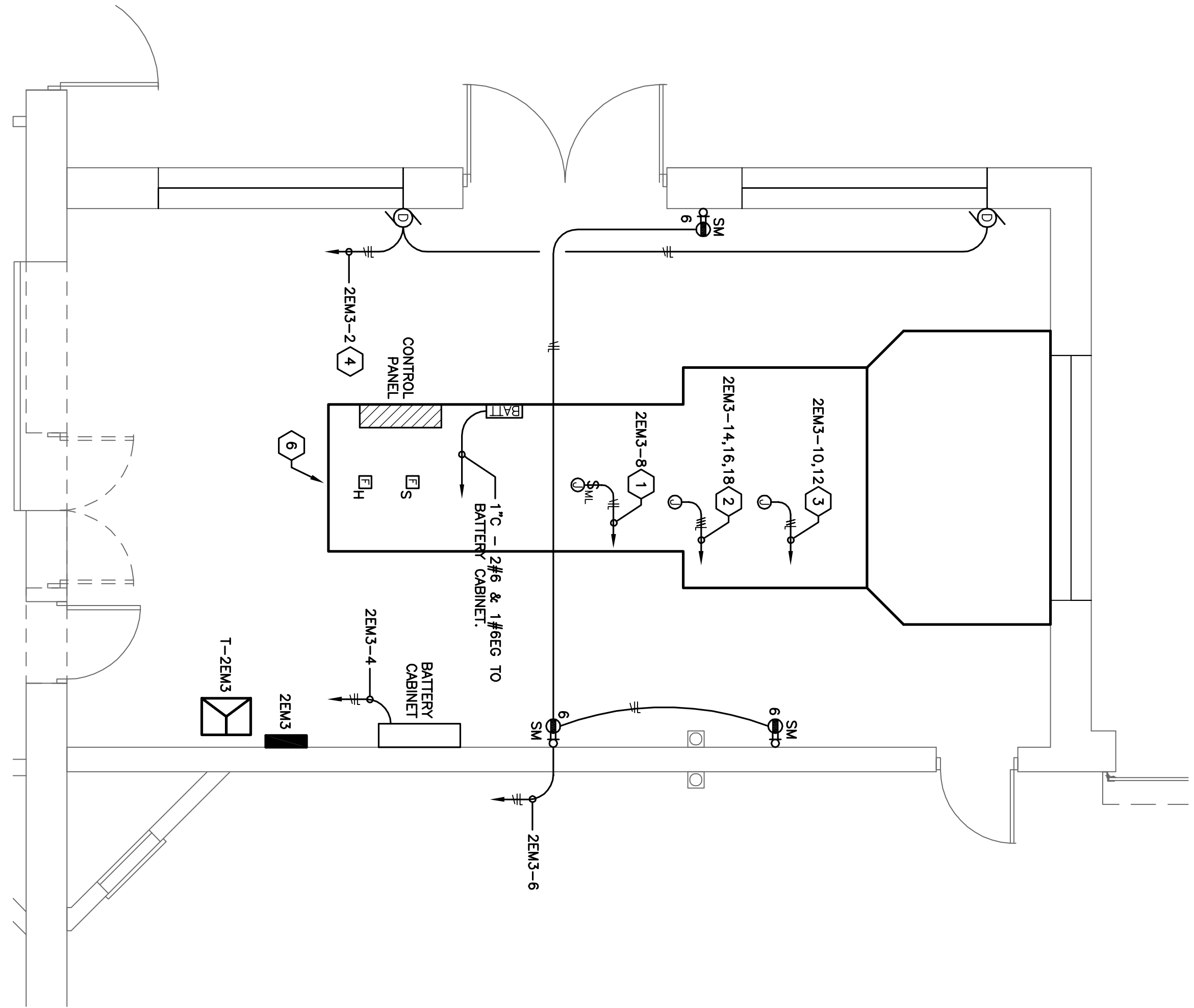


FIRST FLOOR ELECTRICAL KEY PLAN

2

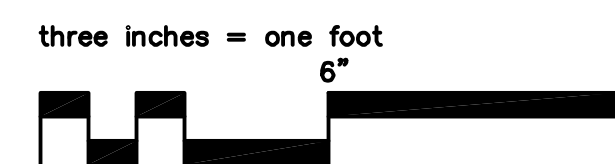
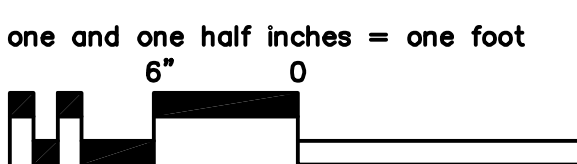
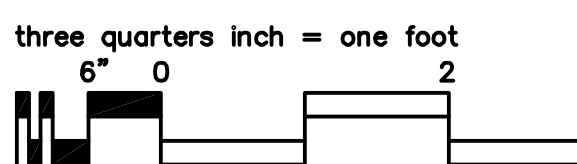
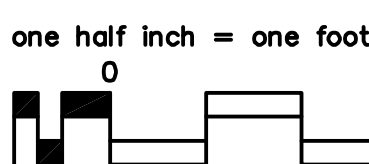
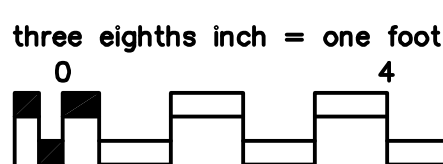
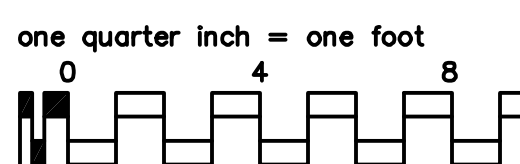
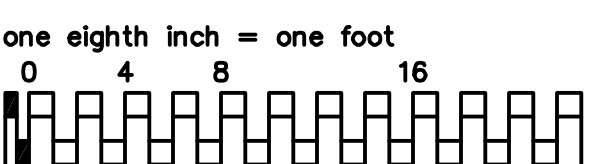


ENLARGED GENERATOR ELECTRICAL NEW PLAN

1

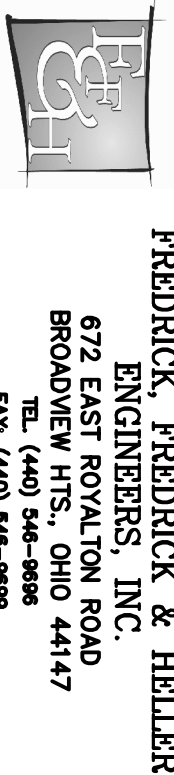
GENERATOR PLAN CODED NOTES:

1. CONNECT RILE RETURN PUMP TO 20A-120V-1Ø CONNECTION IN 2EM3 VA 3/4" C. - 2#12 MANUFACTURE AND SUBMIT ANY DISCREPANCIES TO THE ENGINEER.
2. CONNECT BLACK HEATERS TO 35A-2Ø9A-3Ø CONNECTION IN 2EM3 VA 3/4" C. - 3#8 & 1#8 EX. VERIFY EXACT SIZE AND VOLTAGE REQUIREMENTS WITH EQUIPMENT MANUFACTURE AND SUBMIT ANY DISCREPANCIES TO THE ENGINEER.
3. CONNECT ANTI-CONGESTION HEATER TO 20A-2Ø9A-1Ø CONNECTION IN 2EM3 VA 3/4" C. & #12 EX. VERIFY EXACT SIZE AND VOLTAGE REQUIREMENTS WITH EQUIPMENT MANUFACTURE AND SUBMIT ANY DISCREPANCIES TO THE ENGINEER.
4. PROVIDE 20A-120V-1Ø CONNECTION TO MULTIPLE DAMPER MOTORS. REFER TO GENERATOR SEQUENCE OF OPERATIONS FOR LOWER POSITION REQUIREMENTS. VERIFY CONNECTION FROM GENERATOR TO LOWER POSITION DAMPER MOTOR AND SUBMIT ANY DISCREPANCIES TO THE ENGINEER.
5. PROVIDE GENERATOR REMOTE ALARM ANNUNCIATOR PANEL. LOCATE ADJACENT TO EXISTING GENERATOR REMOTE ALARM PANELS IN ROOM. VERIFY EXACT LOCATION WITH VAMC COR. PROVIDE ALL CONNECTION WIRING IN 3/4" CONDUIT PER OHIO OVERHEAD WIRING REQUIREMENTS.
6. NEW GENERATOR 7Ø47-2000W/2500VA. 4Ø9/277V-3Ø-4W MANUFACTURER: OHIO OVERHEAD. VERIFY EXACT REQUIREMENTS WITH SPECIFICATIONS AND SUBSEQUENT DRAWINGS.

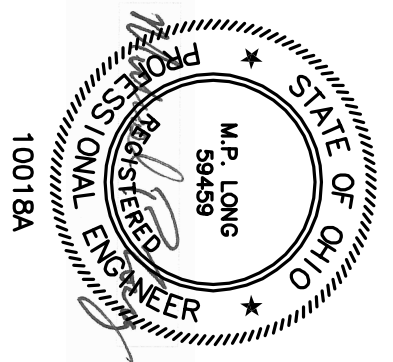


Revisions:	Date
1	03-18-12
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CONSULTANTS:



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Drawing Title
GENERATOR
ENLARGED PLAN

Approved Project Director

Project Title
CHILLER PLANT
GENERATOR &
DISTRIBUTION UPGRADES

Location
VAMC - WADE PARK

Date
04-06-2012

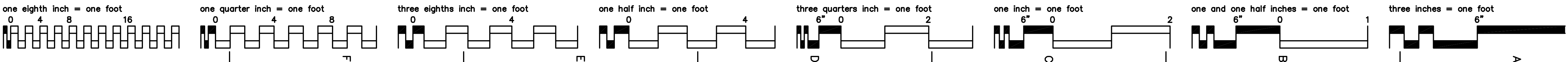
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JDM

2-E2

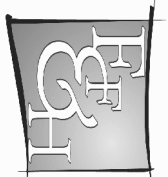
Office of
Facilities
Management



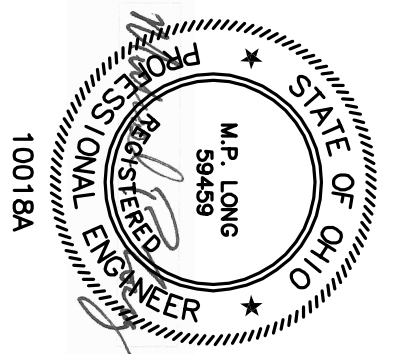


ADDDENDUM I	
FINAL CD SUBMISSION - FOR CONSTRUCTION	06-18-12
Revisions:	04-06-12
Date	

CONSULTANTS:



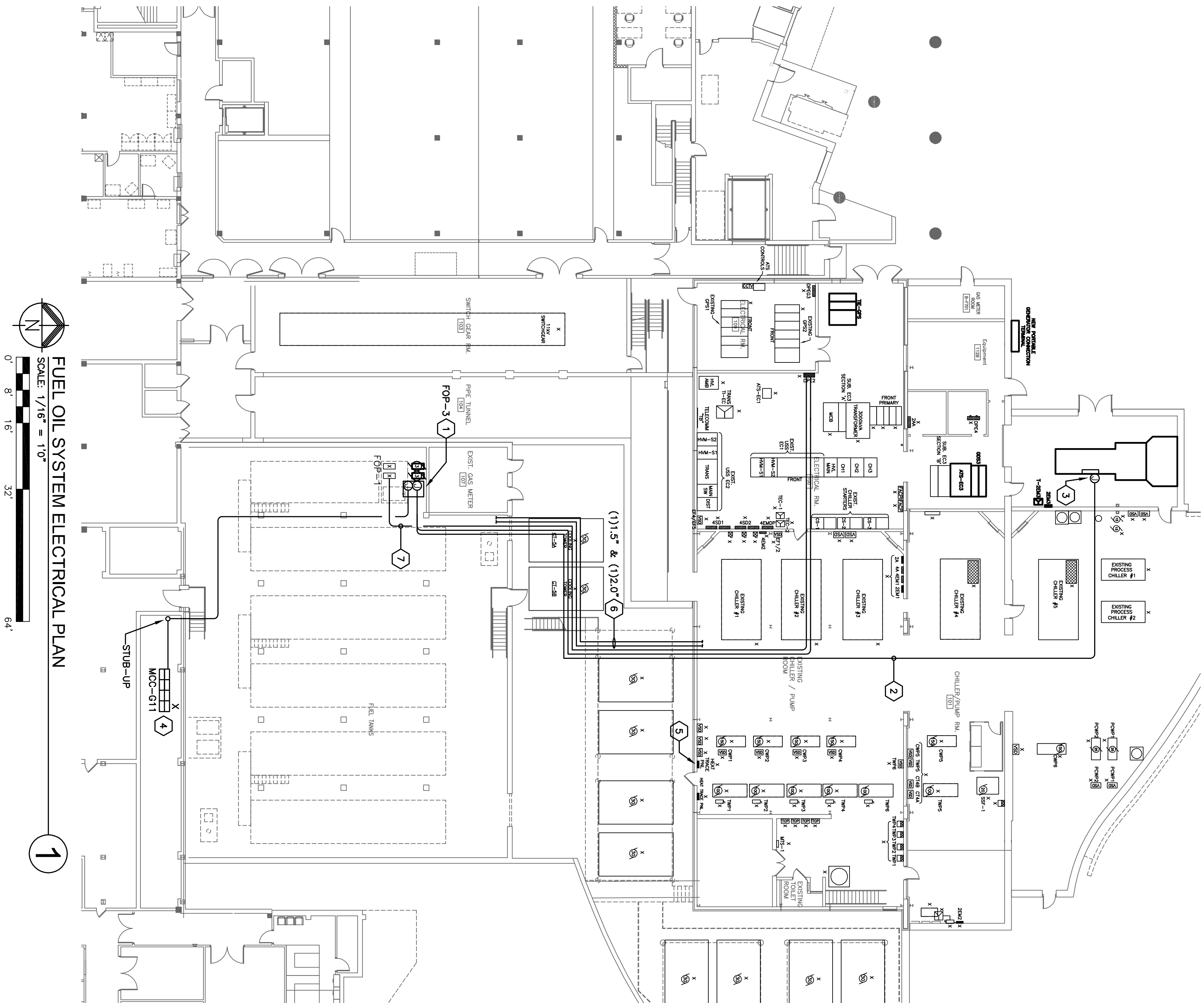
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DESIGN AND CONSTRUCTION DOCUMENTS AS INSTRUMENTS OF SERVICE ARE GIVEN IN CONFORMANCE AND REMAIN THE PROPERTY OF PERSPECTUS ARCHITECTURE. THE USE OF THIS DESIGN AND THESE CONSTRUCTION DOCUMENTS FOR PURPOSES OTHER THAN THE SPECIFIC PROJECT NAMED HEREIN IS STRICTLY PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF PERSPECTUS ARCHITECTURE.



MECHANICAL EQUIPMENT GENERAL NOTES:

- M1. MECHANICAL EQUIPMENT SHALL BE CONNECTED COMPLETE PER MANUFACTURER'S WIRING DIAGRAMS AND DETAILS UNLESS OTHERWISE NOTED ON DRAWINGS.
- M2. CONTRACTOR SHALL CONCEAL CONDUIT AND WIRING IN WALLS AND ABOVE CEILING AND REMOVE LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR IN-FLU CONNECTION TO MECHANICAL EQUIPMENT. REMOVE LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR IN-FLU CONNECTION TO MECHANICAL EQUIPMENT. WATER-TIGHT AND ALL WALL PENETRATIONS TO MAINTAIN FIRE RATING.
- M3. CONTRACTOR SHALL PROVIDE ALL LOCAL DISCONNECTING MEANS FOR ALL MECHANICAL EQUIPMENT. UNLESS EQUIPMENT IS NOTED TO BE FURNISHED WITH INTERNAL DISCONNECTS, LABEL, AND DISCONNECT SWITCHES TO INDICATE POWER SOURCE AND EQUIPMENT SERVED.
- M4. COORDINATE EXACT INSTALLATION LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL PLANS PRIOR TO ROUGH-IN.
- M5. CONDUITS SHALL BE RIGID ALUMINUM AT EXTERIOR LOCATIONS.
- M6. SHARED NEUTRALS ARE NOT PERMITTED FOR BRANCH CIRCUITS.
- M7. REFER TO GENERAL DRAWINGS FOR PHASING AND CONSTRUCTION SCHEDULING NOTES.

COORDINATION NOTE:

ROUTING OF CONDUITS IS FOR GENERAL INFORMATION ONLY. ADDITIONAL OFFSETS, BENDS, ETC. MAY BE REQUIRED TO AVOID EXISTING PIPING, CONDUITS, ETC. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED CONDUITS, PULLBOXES, CABLES, ETC. TO COMPLETE THE FEEDER INDICATED ON THE POWER DISTRIBUTION ONE-LINE DIAGRAM. COORDINATE THE EXACT LOCATIONS OF THE EXISTING CONDUITS AND ROUTING IN FIELD.

ELECTRICAL CODED NOTES:

- ① PROVIDE (2) 200-480V-3Ø ELECTRICAL COWER CONNECTIONS. (1) FROM PANELBOARD #DREZ2 AND (1) FROM MAIN COWER. CENTER (MC-611) TO DUAL POWER FUEL OIL PUMP CONTROLLER VIA 3/4" COND. #312 & 3/4" GROUND EXCH. COORDINATE ROUTING FOR GENERAL PURPOSE ONLY. CONTRACTOR SHALL VERIFY EXISTING ROUTING IN FIELD. COORDINATE WITH MECHANICAL FUEL PUMP PIPING AND PROVIDE ALL ADDITIONAL OFFSETS, BRANS, JOINTION BOXES, ETC. AS REQUIRED FOR A COMPLETE SYSTEM.
- ② PROVIDE COWER WIRING CONNECTION FROM DUAL POWER FUEL OIL PUMP CONTROLLER TO GENERATOR. PROVIDE AND SHALL VERIFY ALL ADDITIONAL OFFSETS IN FIELD. COORDINATE WITH MECHANICAL PIPING PRIOR TO INSTALLATION. FEEDER ROUTING IS FOR GENERAL PURPOSE ONLY. CONTRACTOR SHALL VERIFY EXISTING ROUTING IN FIELD. COORDINATE WITH MANUFACTURER PRIOR TO INSTALLATION. FEEDER ROUTING IS FOR GENERAL PURPOSE ONLY. PROVIDE ALL ADDITIONAL OFFSETS, BRANS, JOINTION BOXES, ETC. AS REQUIRED.
- ③ VERIFY EXISTING COWER LOCATION AND REQUIREMENTS TO GENERATOR PER MANUFACTURER WIRING DIAGRAMS.
- ④ PROVIDE NEW 200-3Ø SUPPLY IN SPACE FIRST FLOOR COWER CENTER (MC-611) CABLED TO SPLITTER FUEL OIL PUMP SYSTEM. REMOVE EXISTING SPACE CABLES, BREAKERS, STARTER, CONTROLS, ETC. COMPLETE. PROVIDE ON/OFF CONTROLS ON MC-611 FOR MAIN BREAKER. PROVIDE NEW PNEUMATIC LABEL THAT READS GENERATOR G- FUEL OIL PUMP FOR 3-Ø.
- ⑤ EXISTING HEAT TRACE, POWER DISTRIBUTION PANEL, #T12 WITH (1) SPACE 200-1Ø BRANCH CABLE TO MAIN BREAKER. PROVIDE NEW 200-1Ø BRANCH CABLE TO MAIN BREAKER. REFER TO SPECIFICATIONS SECTION 220533 FOR ADDITIONAL REQUIREMENTS.
- ⑥ CONTRACTOR SHALL PROVIDE HEAT TRACE SELF REGULATING RESISTANCE HEATING CABLES FOR ALL NEW EXTERIOR FUEL OIL PIPING. COORDINATE EXIST PIPING SIZE, LOCATION AND MANUFACTURER. MECHANICAL DRAWINGS. VERIFY ADDITIONAL REQUIREMENTS WITH MANUFACTURER.
- ⑦ PROVIDE SECONDARY SOURCE OF POWER TO FUEL OIL PUMP SYSTEM. 709-1Ø, PROVIDE 200-480V-3Ø ELECTRICAL POWER CONNECTION TO DREZ2 VIA 3/4" COND. #312 & 3/4" GROUND. CONNECT PER MANUFACTURER WIRING DIAGRAMS.

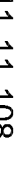
HEAT TRACE WIRE SIZING CHART:

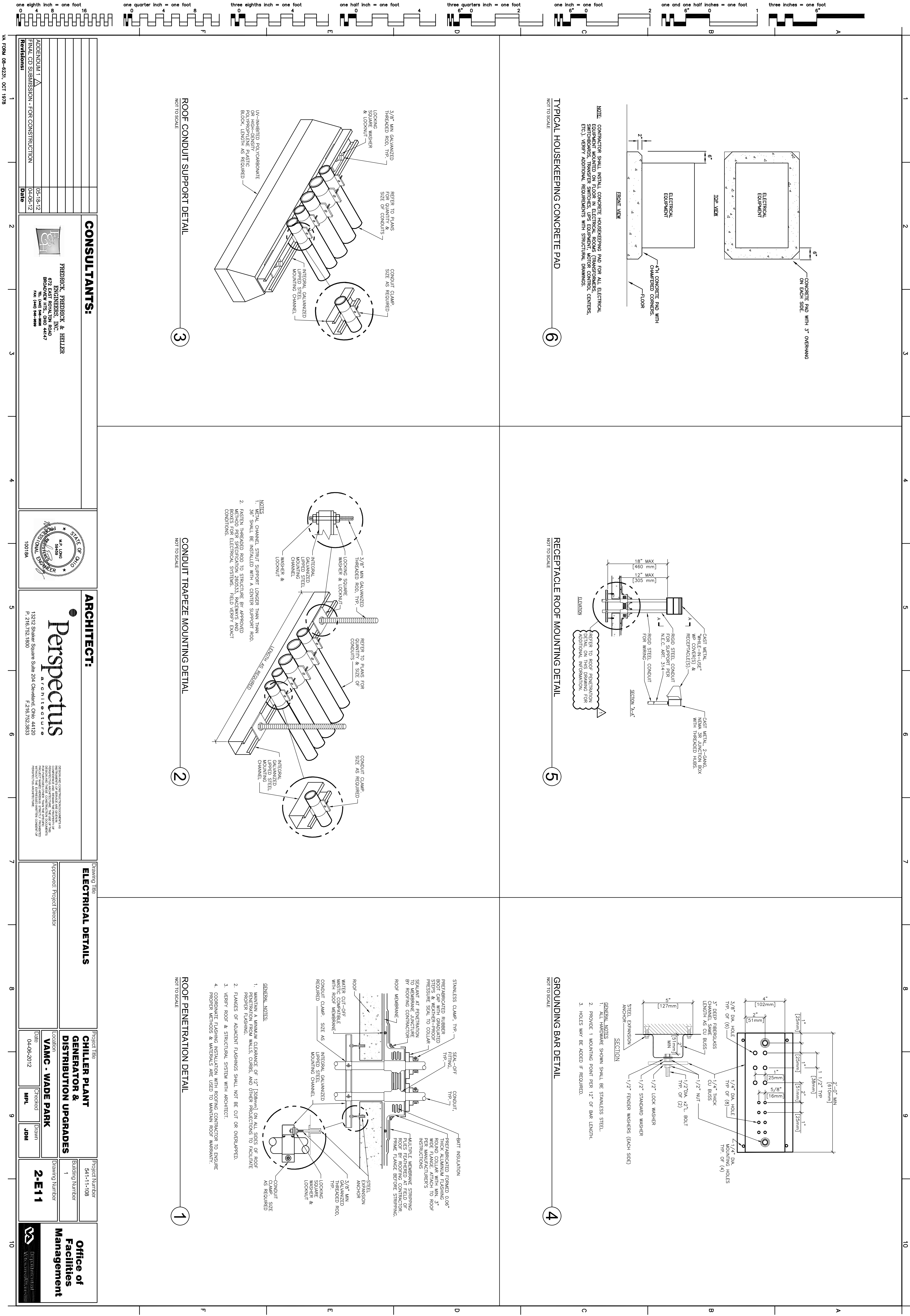
PIPE SIZE	HEAT TRACE POWER OUTPUT (W/ft)
1.5"Ø	(1) 3W/ft
2"Ø	(1) 3W/ft

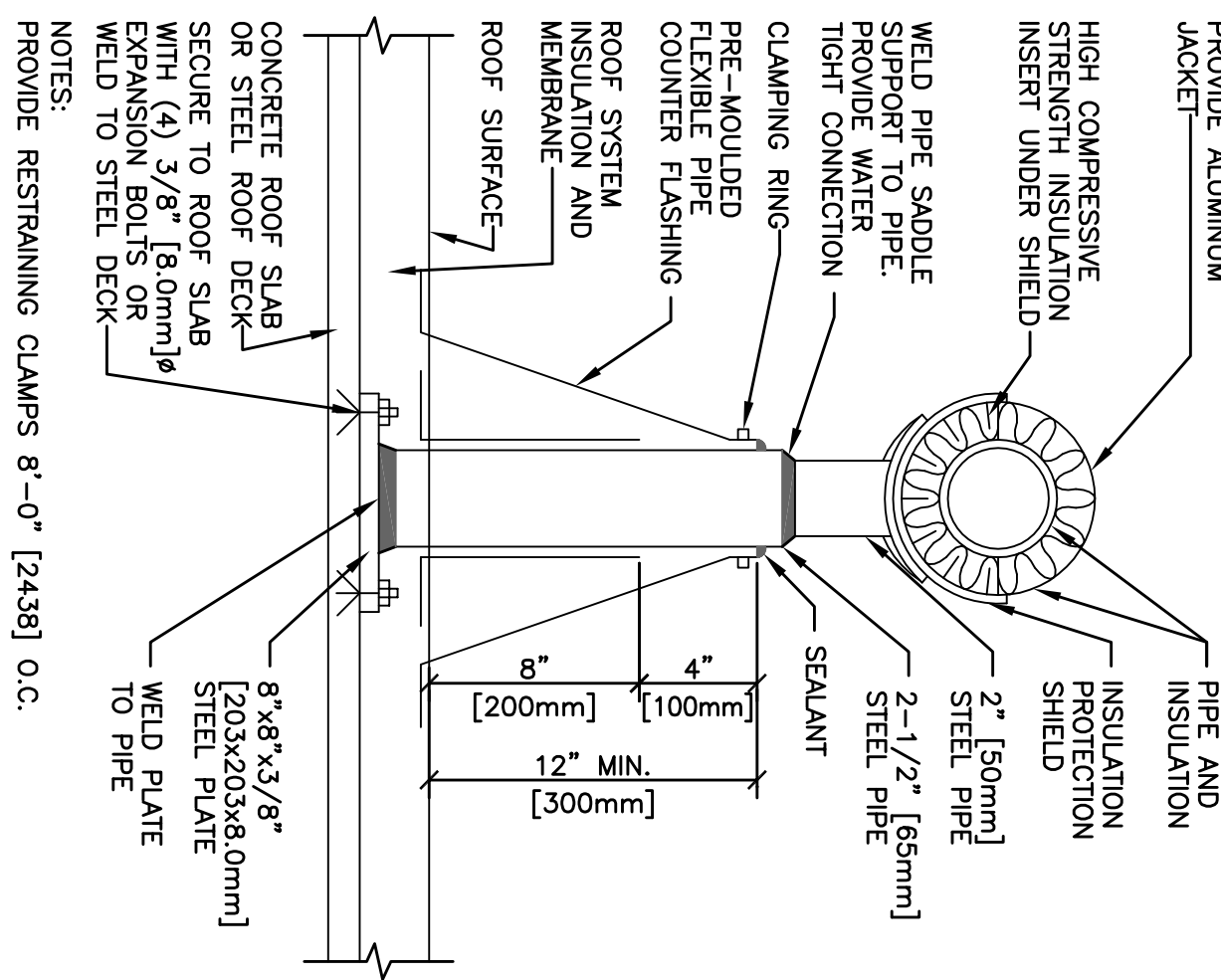
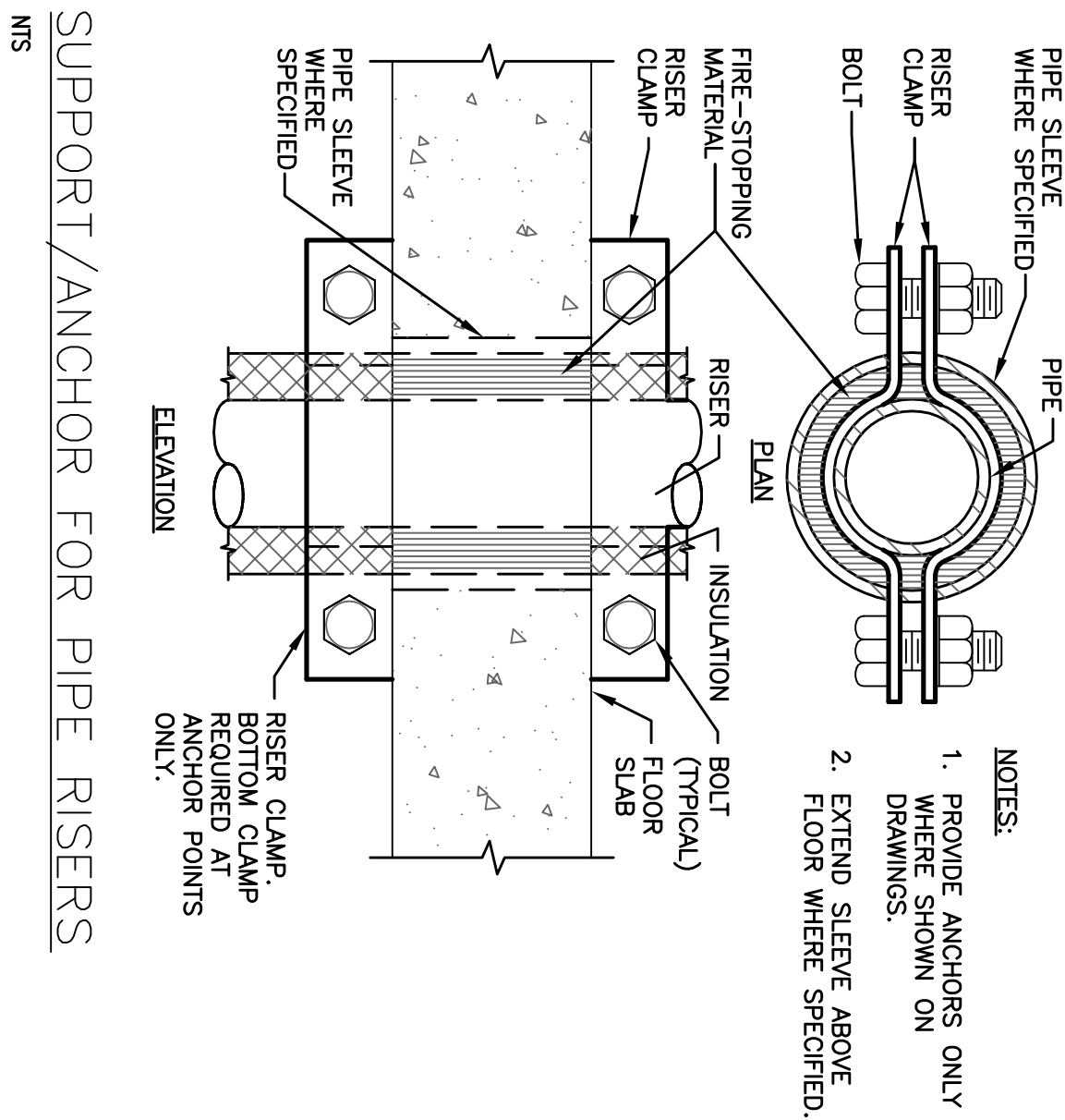
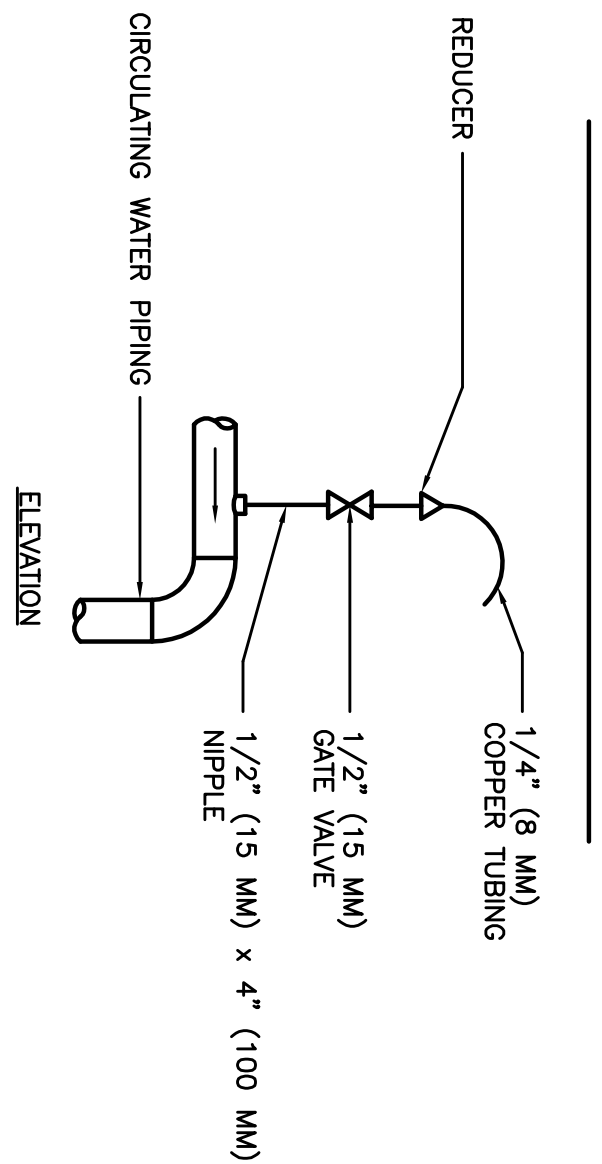
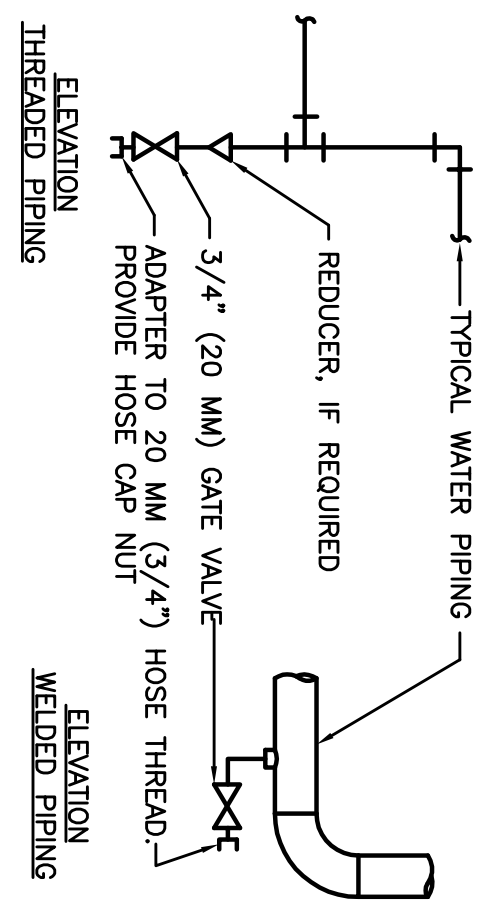
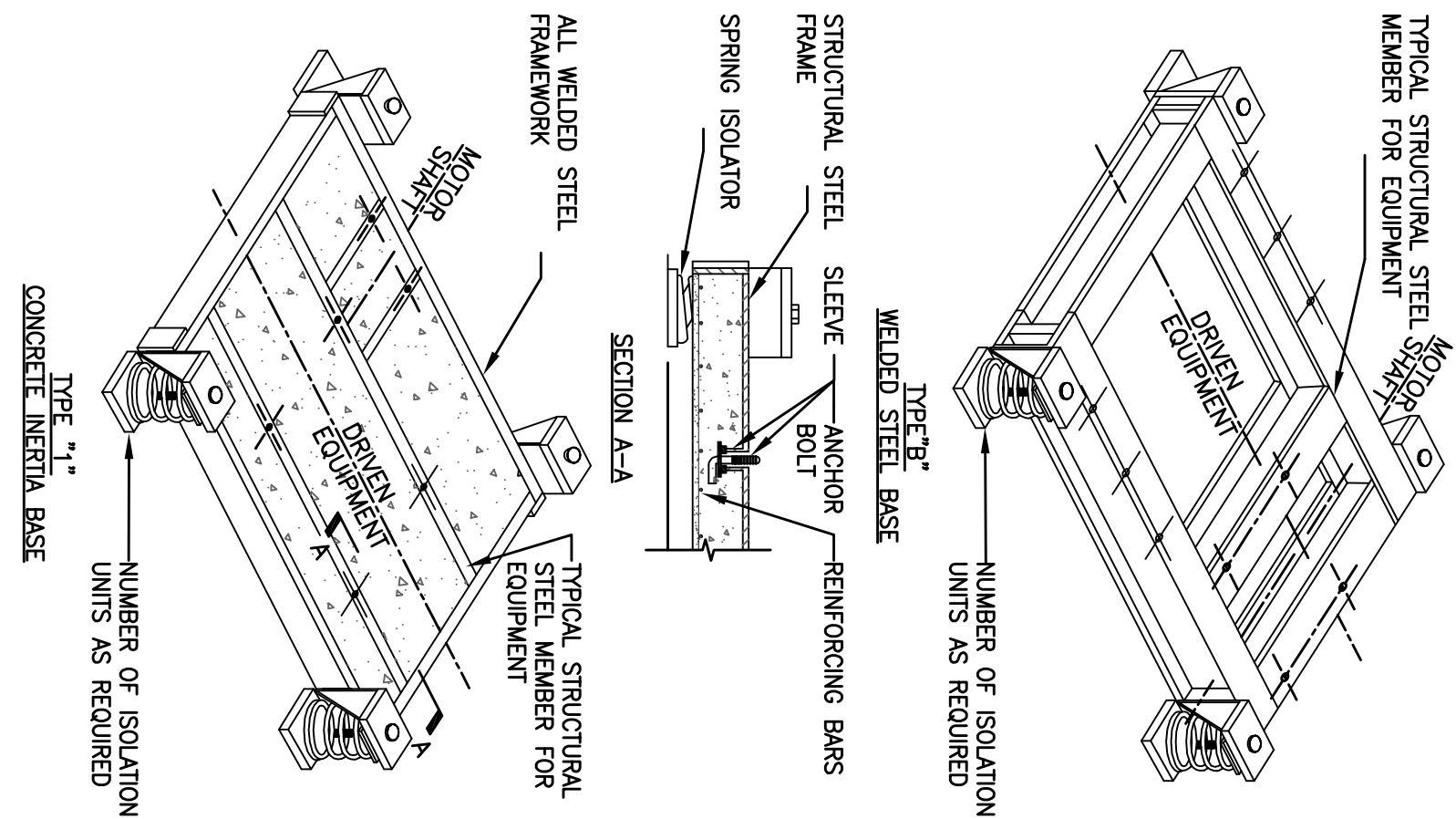
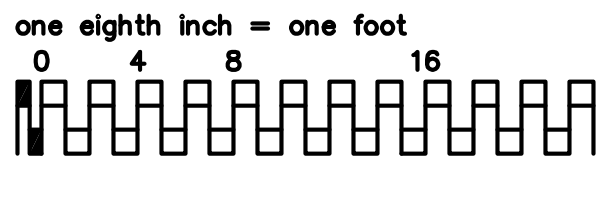
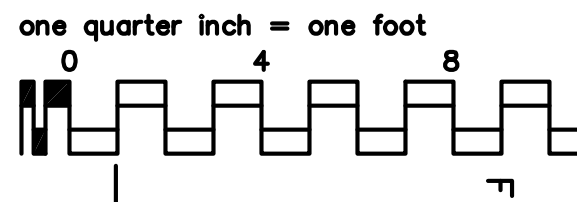
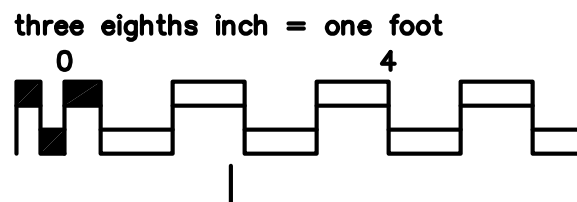
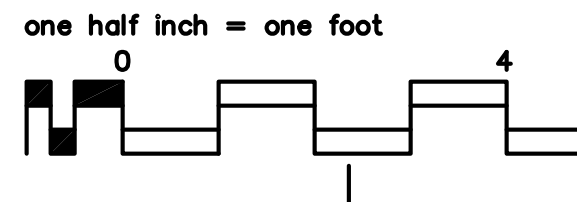
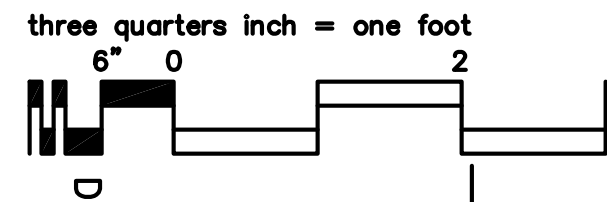
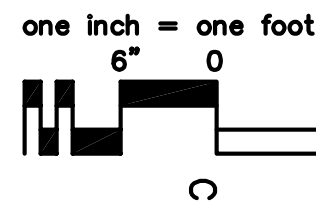
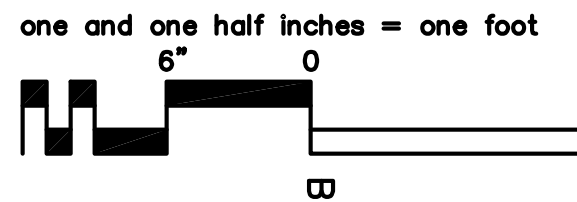
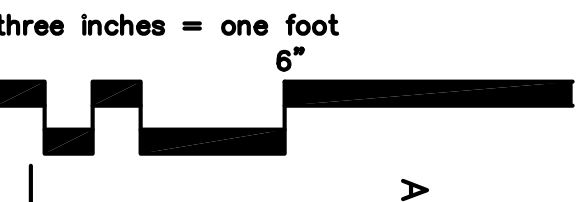
GENERAL NOTES:

1. THE HEAT TRACE RATING IS BASED ON 1-1/2" THICK FIBERGLASS INSULATION, RAY 277-10 POWER CONNECTION, COMBINED WITH MANUFACTURER'S RECOMMENDATIONS AND ANY CHANGES BY MANUFACTURER AND ENGINEER.
2. CONTRACTOR SHALL PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE HEAT TRACE SYSTEM, INCLUDING BUT NOT LIMITED TO, TAPES, ELECTRICAL TRACED TUBES, AND THERMOSTAT, SEALS, GLASS TUBES, AND THERMISTORS.
3. CONTRACTOR SHALL COMPLY WITH HEAT TRACE POWER OUTPUT REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADDITIONAL SIZES AND COMPONENTS AS REQUIRED BY HEAT TRACE MANUFACTURER'S RECOMMENDATIONS AND MANUFACTURER'S WIRING DIAGRAMS WITH SHOP DRAWINGS FOR APPROVAL.
4. REFER TO SPECIFICATIONS SECTION 220533 FOR ADDITIONAL REQUIREMENTS.

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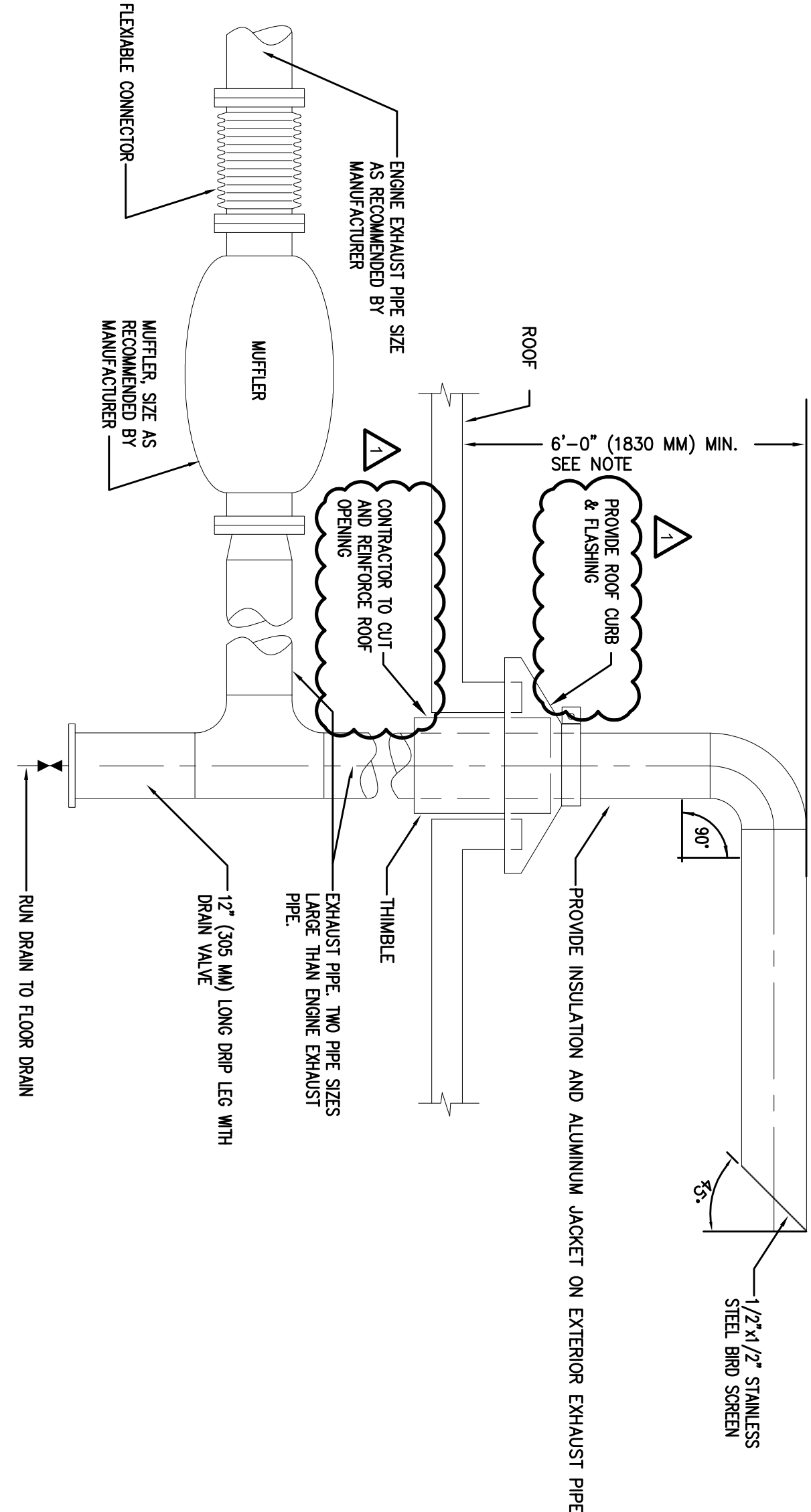
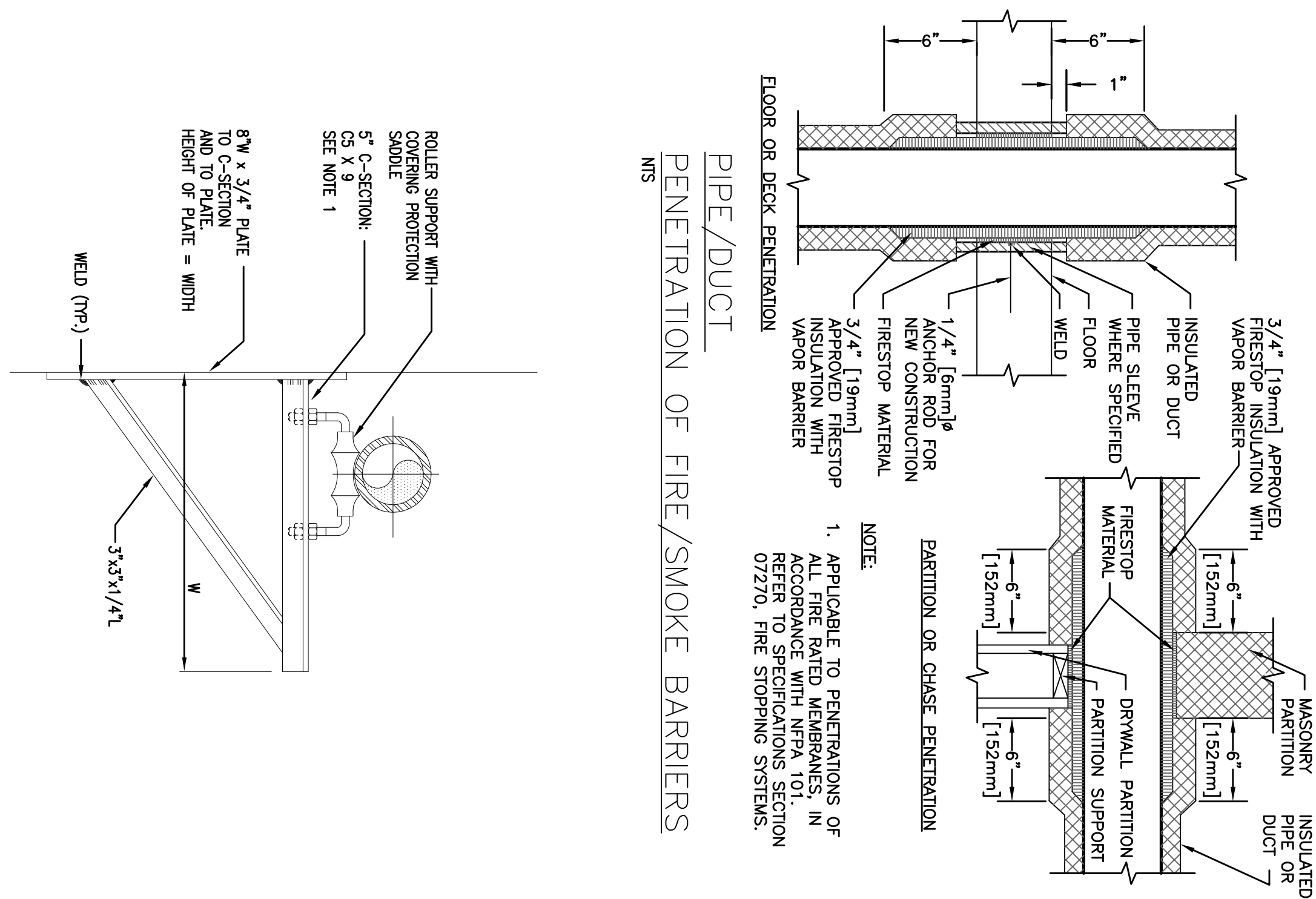
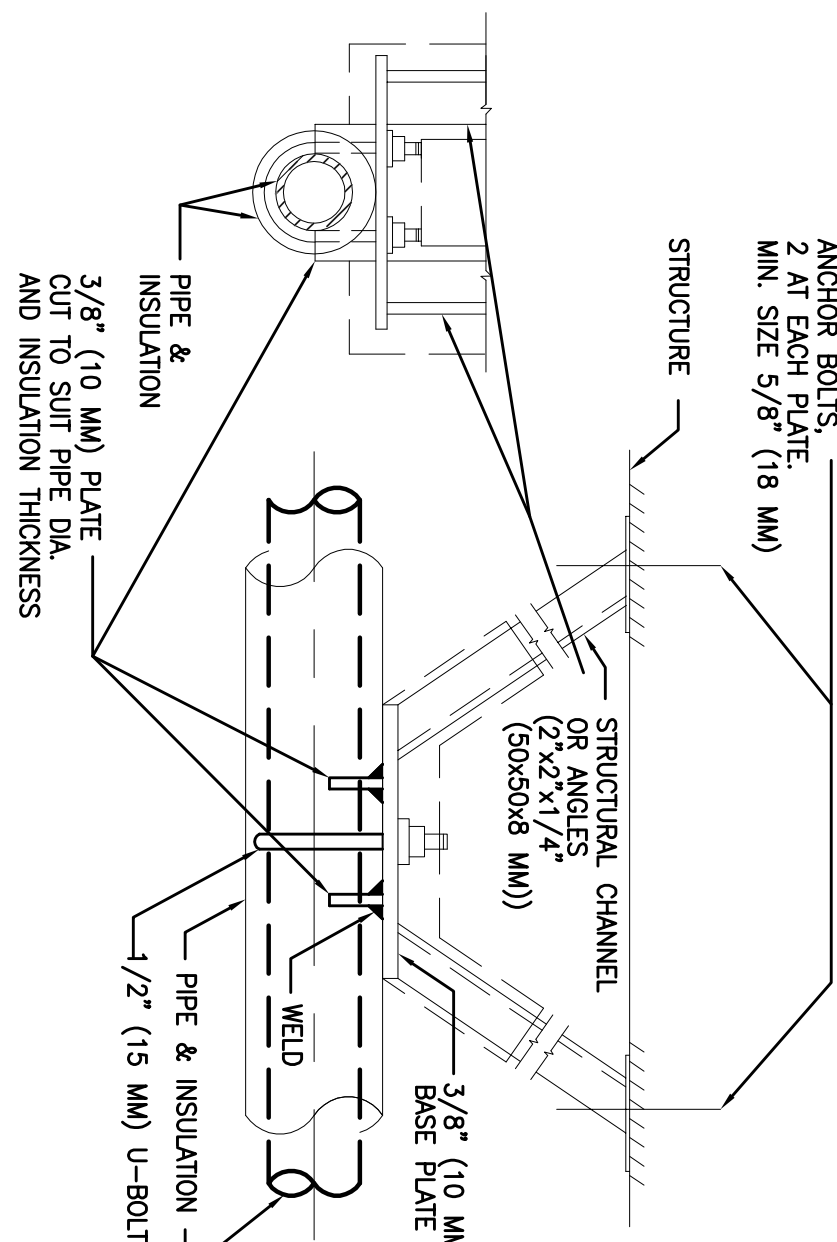
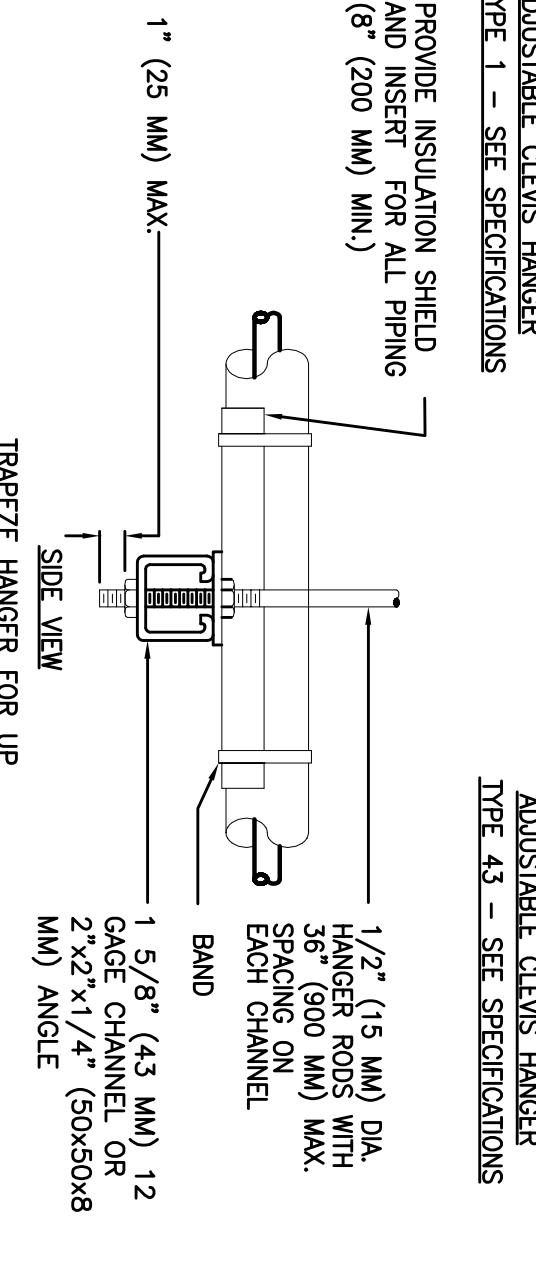
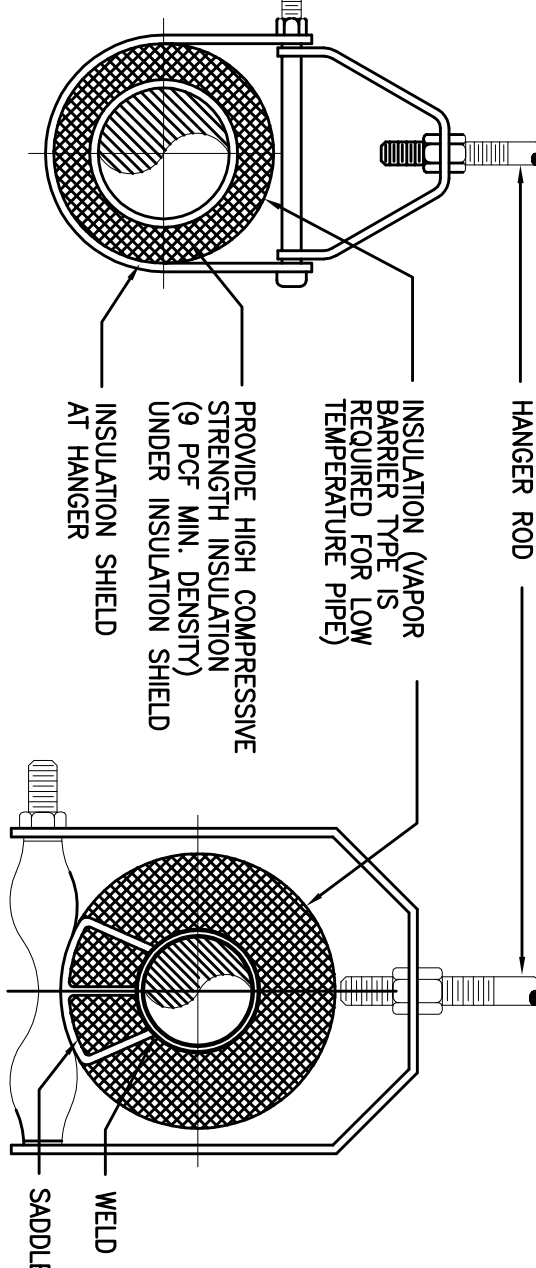
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FUEL OIL SYSTEM ELECTRICAL PLAN	CHILLER PLANT GENERATOR & DISTRIBUTION UPGRADES			541-1-1-108	
				Building Number 1	
Approved: Project Director	Location VAMC - WADE PARK			Drawing Number 2-E5	
	Date 04-06-2012	Checked MPL	Drawn JDM		
				 Office of Facilities Management Department of Veterans Affairs	





MATERIAL	MAXIMUM PIPE/TEBING SUPPORT SPACING							
	1	2	3	4	5	6	7	8
THRU 3/4"	1	1.4/1.1	1.9/2	2	2.1/2	3	4	5
NOM. SIZE (MM)	(20)	(32)	(40)	50	(63)	(75)	(100)	(125)
PIPE (M)	7	7	9	10	11	12	14	16
(2.1)	(2.1)	(2.1)	(3.0)	(3.4)	(3.7)	(4.1)	(4.9)	(5.2)
TEBING (M)	5	5	5	5	5	5	5	5
(1.6)	(2.1)	(2.1)	(2.3)	(2.7)	(3.0)	(3.1)	(4.5)	(4.9)

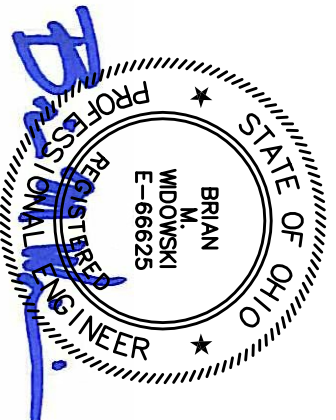
NOTE: FOR PIPE/TEE HANGER LAG SPACING OF SMALLEST SIZE ON PIPE/TEE.



ADDENDUM 01	06-18-12
FINAL CD SUBMISSION - FOR CONSTRUCTION	04-06-12
Revisions:	Date

CONSULTANTS:

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ARCHITECTS

Perspectus

architecture

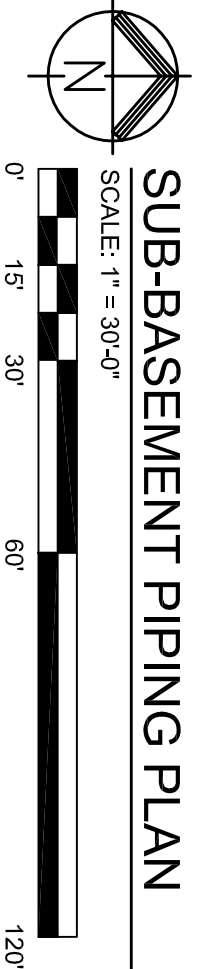
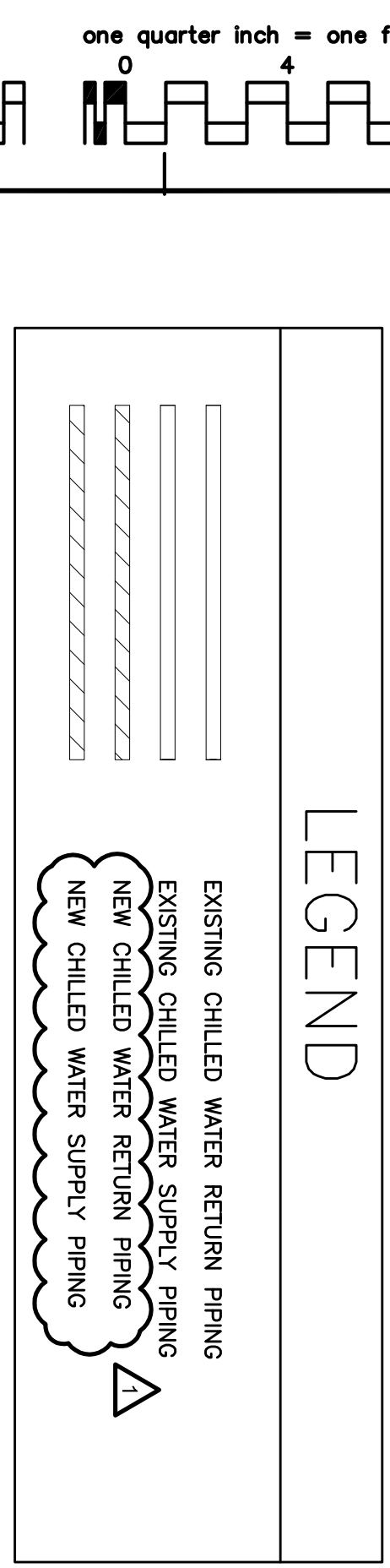
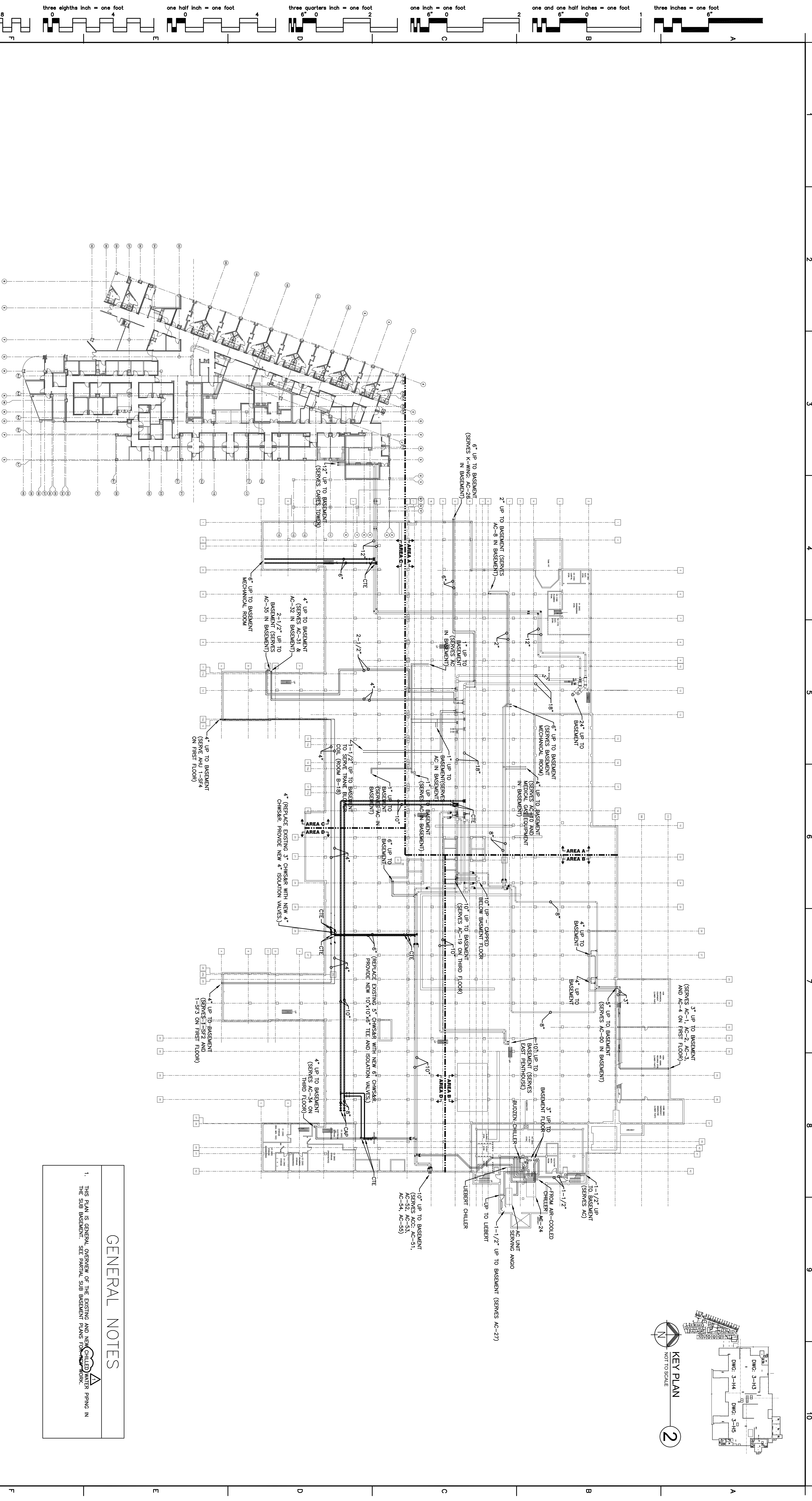
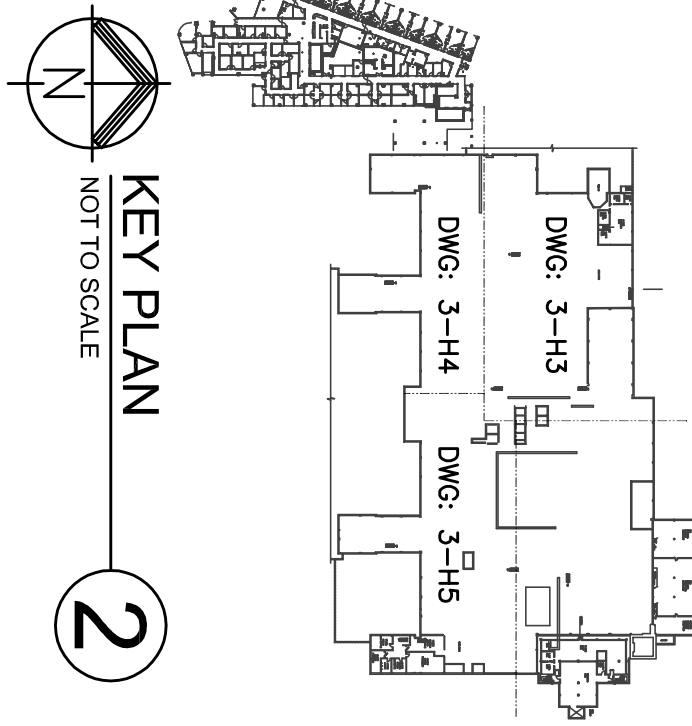
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Drawing Title MECHANICAL DETAILS	Project Title CHILLER PLANT GENERATOR & DISTRIBUTION UPGRADES		Project Number 541-11-108
			Building Number 1
Approved: Project Director	Location VAMC - WADE PARK		Drawing Number 1-H2
	Date 04-06-2012	Checked BMW	Drawn LDH
			 Dunelmateriel/ Wichemore Affairs

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**Office of
Facilities
Management**

Department of
Veterans Affairs



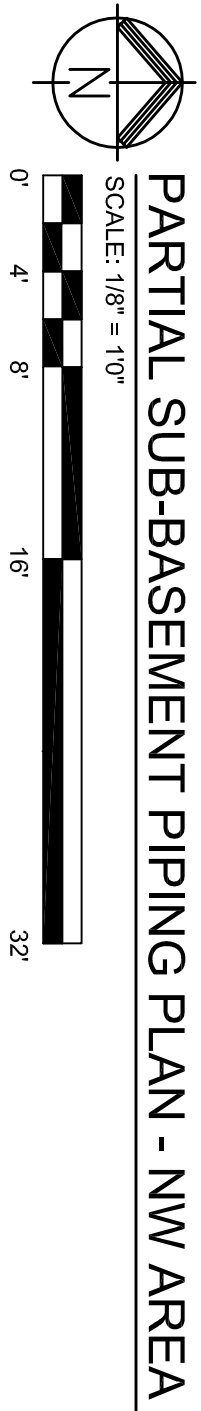
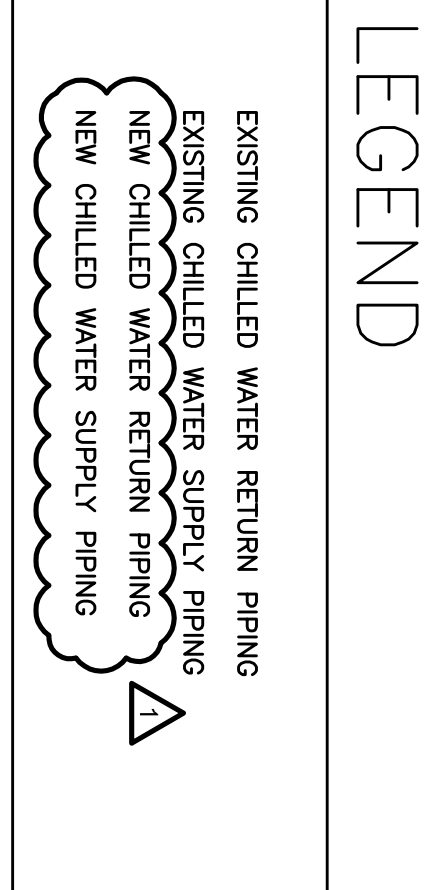
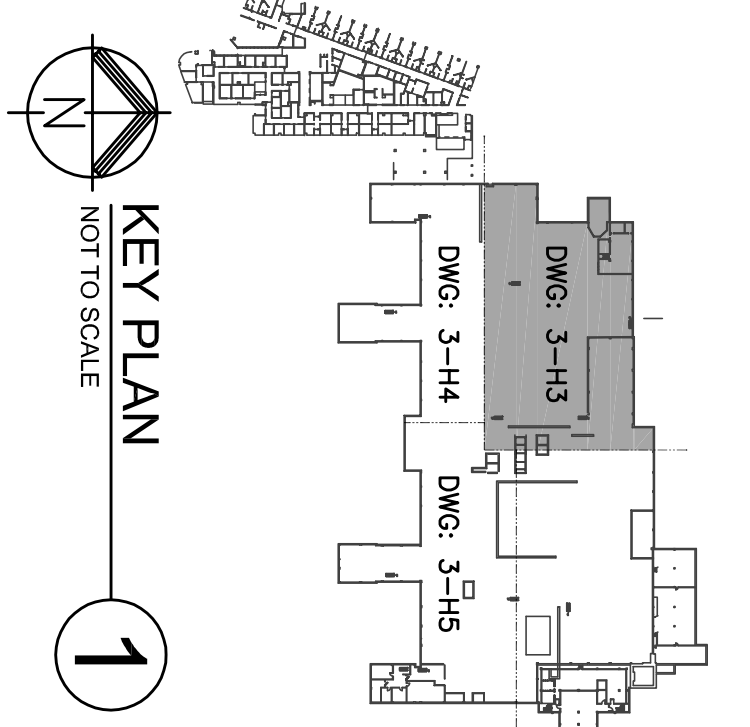
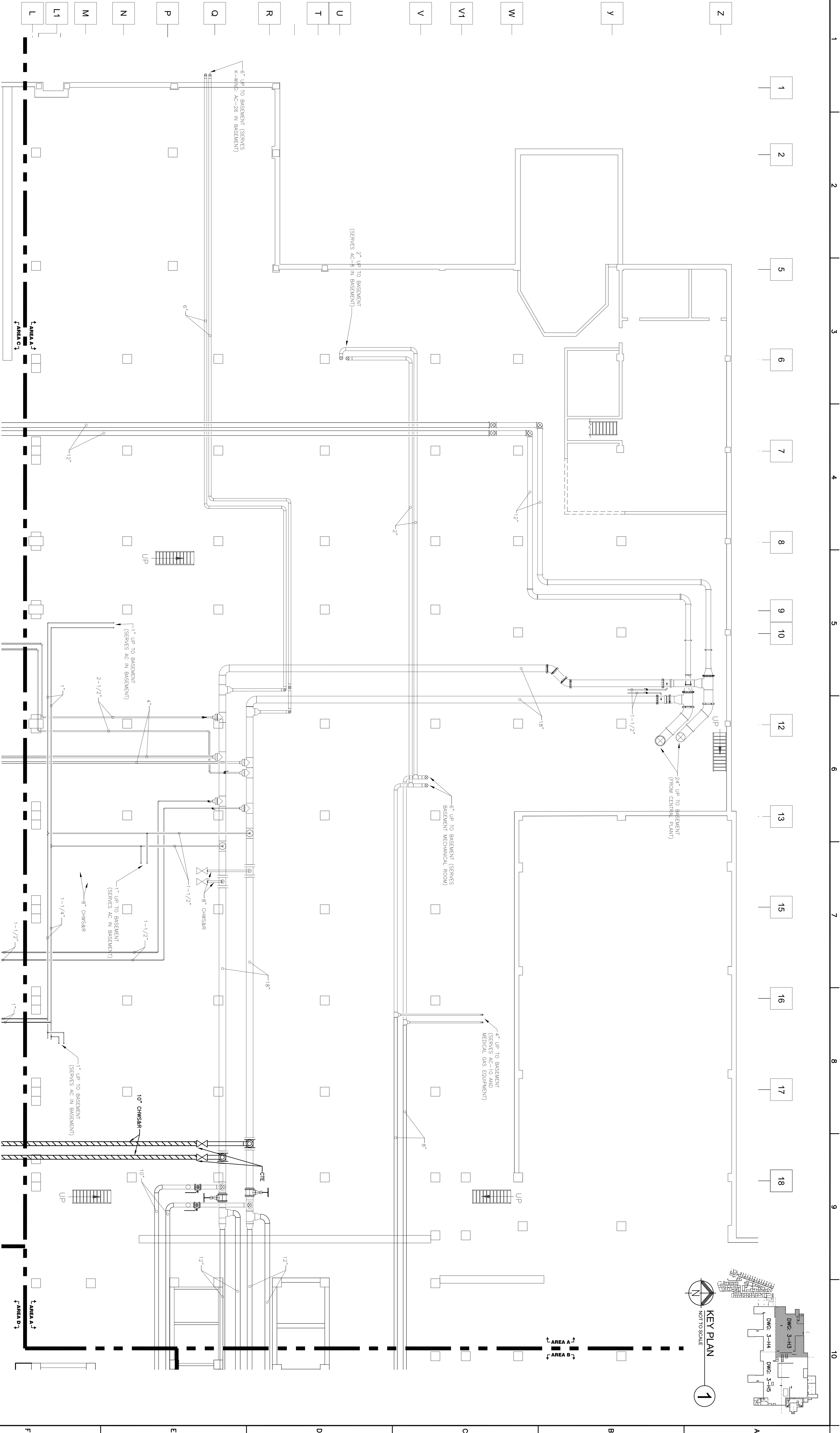
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GENERAL NOTES

1. THIS PLAN IS GENERAL OVERVIEW OF THE EXISTING AND NEW CHILLED WATER PIPING IN THE SUB-BASEMENT. SEE PARTIAL SUB-BASEMENT PLANS FOR MORE WORK.

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Revisions		SUB-BASEMENT - PIPING PLAN	
ADDDENDUM 01	06-18-12	CHILLER PLANT GENERATOR & DISTRIBUTION UPGRADES	
FINAL CD SUBMISSION - FOR CONSTRUCTION	04-06-12	VAMC - WADE PARK	
DATE		Drawing Number	
		541-11-108	
		Building Number	
		1	
		Drawing Number	
		3-H2	
		Office of Facilities Management	
		Department of Veterans Affairs	



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CONSULTANTS:		ARCHITECT:	
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Revisions		Drawing Title	
APPENDIX 01 FINAL CD SUBMISSION - FOR CONSTRUCTION		PARTIAL SUB-BASEMENT PIPING PLAN - NW AREA	
DATE		Project Title	
06-18-12		CHILLER PLANT GENERATOR & DISTRIBUTION UPGRADES	
04-06-12		Location	
		VAMC - WADE PARK	
		Date	
		04-06-2012	
		Checked	
		BMW	
		Drawn	
		DAD	
		Drawing Number	
		3-H3	
		Project Number	
		541-11-108	
		Building Number	
		1	
		Office of Facilities Management	
		Department of Veterans Affairs	

